What is claimed is:

1. A base station apparatus comprising:

reception SIR calculating means for calculating a signal to interference ratio using a value obtained by averaging interference signal power for several slot times;

reference value deciding means for deciding whether the calculated signal to interference ratio is greater than a reference value or not; and

TPC creating means for creating transmit power control information to instruct either an increase or decrease of transmit power based on the number of slots used to calculate interference signal power by averaging and the decision result of said reference value deciding means.

2. The base station apparatus according to claim 1, wherein when the number of slots used to calculate interference signal power by averaging falls short of a predetermined number, the TPC creating means creates transmit power control information instructing an increase of transmit power.

3. The base station apparatus according to claim 1, wherein when the number of slots used to calculate interference signal power by averaging falls short of a predetermined number, the TPC creating means creates transmit power

control information so that the count of transmit power control information instructing an increase of transmit power created so far does not fall below the count of transmit power control information instructing a decrease of transmit power.

4. The base station apparatus according to claim 1, wherein when the number of slots used to calculate interference signal power by averaging falls short of a predetermined number, the TPC creating means creates transmit power control information whose content is opposite to that of the immediately preceding transmit power control information.

5. The base station apparatus according to claim 1, wherein when the number of slots used to calculate interference signal power by averaging satisfies a predetermined number, the TPC creating means creates transmit power control information instructing a decrease of transmit power when the signal to interference ratio is greater than a reference value and creates transmit power control information instructing an increase of transmit power when the signal to interference ratio is equal to or smaller than the reference value.

6. The base station apparatus according to claim 1, wherein the reception SIR calculating means starts to measure interference signal power for a communication terminal

apparatus with which to establish a new radio connection prior to starting control of uplink transmit power of the communication terminal apparatus based on the transmit power control information inserted into the downlink.

7. A communication terminal apparatus that carries out radio communication with the base station apparatus according to claim 1 and controls transmit power based on transmit power control information sent from said base station apparatus.

8. A transmit power control method for creating transmit power control information instructing an increase of transmit power until a base station apparatus can correctly estimate interference signal power against a signal sent from a communication terminal apparatus with which a new radio connection has been established.

9. A transmit power control method for creating transmit power control information so that the count of transmit power control information instructing an increase of transmit power created so far does not fall below the count of transmit power control information instructing a decrease of transmit power until a base station apparatus can correctly estimate interference signal power against a signal sent from a communication terminal apparatus with which a new radio connection has been established.

10. A transmit power control method for creating transmit power control information whose content is opposite to that of the immediately preceding transmit power control information until a base station apparatus can correctly estimate interference signal power against a signal sent from a communication terminal apparatus with which a new radio connection has been established.

11. The transmit power control method according to claim 8, wherein the base station apparatus starts to measure interference signal power in advance for a communication terminal apparatus with which to establish a new radio connection.